



SINGLE FAMILY RESIDENCE CHECKLIST – 2000 IRC

City of Houston

Submit two (2) sets of non-erasable/legible ready-for-construction plans including (but not limited to) a survey and a Site Plan. The following are some of the basic or frequently overlooked code requirements that must be detailed on plans for Single Family Dwellings and may be useful as a checklist for the designer. This list is not intended to be exhaustive of all possible requirements. The comprehensive list of requirements is contained in the Construction Code, and City Code of the city of Houston. Neither this list nor the code may be construed to allow deed restriction violation. Inconsistencies between details will be noted as needing to be corrected.

GENERAL REQUIREMENTS

Code Ref.	Requirements	✓
IRC R105.1	RESIDENTIAL PERMIT APPLICATION	
IRC R108.3	• Cost of construction (material and labor at industry costs, permanent equipment, and overhead) documentation required if below minimum cost per square foot.	
IRC 105.3	• Legal description	
IRC 101.2	• # stories	
APPLICATION	• Owner's Project Manager contact info.	
ORD 10-552	• Deed Restriction affidavit	

Code Ref.	Requirements	✓
City ORD 47-18.1	WASTEWATER – TAPS & METERS	
ORD 47-4	• Water meter account	
ORD. 47-278 - 47-300	• Wastewater capacity application and fees or exemption form	
ORD 47-13	• Utility connection locations	
ORD47-60 – 47-676	• Water/Sewer – Stormwater	
ORD 40-1	• Wastewater - Sewer	
ORD 19-33 – 19-41	FLOOD (Federal Requirements)	
ORD 40-182	TRAFFIC	

SPECIFIC REQUIREMENTS

Code Ref.	Requirements	✓
IRC R105.3 & R106.2	SITE PLAN W/ LEGAL DESCRIPTION	
IRC R106.2	• Dimension	
ORD 33-123-33-128	• Landscape form for trees	
ORD 42-180 – 42-184	• Replat for multiple dwellings on one lot	
CITY ORD: Storm Water 47-601 – 47-676	• Must be six (6) inches off property line if roof drains to one side (cannot drain onto neighbors property)	
ORD 42-150 – 42-162	• Building setbacks (building lines)	
IRC R106.2	• Easements	
IBC Appendix E	• Grading Worksheet - fill & excavation	
IRC R401.3	• Res. Site Improvement Permit w/common area agreement (shared utility or egress)	
IRC R106.1	ENGINEERS SEAL – when required	
IRC R106.1	• Required on foundations	
IRC R106.1	• Required on structural steel	
IRC R106.1	• Required for prefab trusses, & beams	
IRC R106.1	• Stairs & ramps	
IRC R106.1	• Required for masonry >2' and fences > 8'	
IRC R106.1	• Windstorm designs other than App. L	
IBC 1702	• Special inspections for welding, bolting, piers, and post-tension designs	
Engineering Practice Act	• Signed and dated after latest revision, by engineer responsible for those revisions	
IRC R106.1.1	FLOOR PLANS – sufficient clarity...	
IRC R106.1.1	• Room labels "according to use"	
IRC R106.1.1	• Dimensions	
IRC Chap. 4	FOUNDATION PLAN	
IRC R401	• References on plans to specific details	
IRC R403.1.9	• Beam sections	
IRC R404.4.6	• Reinforcement details	
IBC Ch. 17	• Drilled pier details "special inspection"	
IRC Chaps. 5, 6 & 8	FRAMING PLANS	
Chap. 5-floors, 6-walls & 8 roof/ceil.	• Wall Sections – Foundation to ridge	
	• Floor, ceiling & roof framing details	
IRC R1102	• Insulation R-values Ref: I.E.C.C.	
IRC R309.2 Table 702.3.5	• Garage separation – ½ inch gypsum board except ceiling below habitable space must be 5/8 inch Type X	
IRC Chaps. 5-floor, 6-walls & 8-roofs	• Lumber size, grade, species, and spacing for studs, joists, rafters	
IRC R301, and Appendix L	• Windstrapping from Appendix L, or sealed engineered design	
R602.10.3 wall R802.11 roof	• Wind bracing details-Ref 301.2(4) 110mph wind speed	
IRC R602.3.1	• Nailing schedule	
IRC R807 M1305.1.3	• Attic access 22"x30" if no equipment, or 30"x54" & 350lb load ladder if equip in attic	
Energy Handout	• Framing dimension must be large enough to allow for R-value insulation thickness	
IRC R106.1.1	• Rafter layout and gutters at property line	
IRC & IBC	RATED WALLS – PROTECTED OPENINGS	
IBC Tables 720.1 (1-3), UL or Gypsum Manual	• Fire-rating and design numbers UL, USG, IBC Ch 7 (keyed to assemblies on plan)	
IRC R302.1	• Ext. wall <3' to property line must be 1hr fire-rated w/max. 1/3 distance overhang	
IBC 2110.1.1(.1)	• 45 minute fire-rated glass block masonry units, otherwise no openings	
IBC 720.1 (1) struct. IBC 720.1 (2) walls IBC 720.1 (3) roofs	• Attach photocopies of fire-rated design data from approved agency to the plans (IE: UL, USG, or IBC Chap. 7)	
IRC R321.2.2	• Townhouse roof parapets or class B w/penetrations 5' away	

Code Ref.	Requirements	✓
IRC R317	SMOKE DETECTORS	
R317.1	• Must be hard wired, and interconnected with battery backup.	
R317.1 (1)	• Located in all bedrooms	
R317.1 (2)	• Areas providing bedroom access (12 ft)	
R317.1 (3)	• On each floor level	
IRC R1003.1	FIREPLACE DETAILS – need type	
IRC R1001.6 & Figure R1003.1	• Chimney termination 2 feet higher than any portion of structure within 10 feet	
IRC R1003 masonry R1003.9, 10 hearth	• If masonry, full details w / hearth dimension and floor material distinction	
IRC R310 & R311	EXITS – EMERGENCY ESCAPE & RESCUE	
IRC R310	• Egress windows from bedroom	
IRC R310.1.1	• 5'-0" sq. ft. openable at grade and 5'-7" sq. ft. openable above grade	
IRC R310.1.2	• Min. 24" high opening	
IRC R310.1.3	• Min. 20" wide opening	
IRC R311.3	• Exit Door (one 3'-0" by 6'8")	
IRC Chap. 3	STAIRS – GUARDS & HANDRAILS	
IRC R316.2	• Guardrails – maximum 4" openings and 36" height	
IRC R315.1	• Handrails – 34" – 38" height	
IRC R314.2	• Maximum 73/4" rise, minimum 10" run	
IRC R314.8	• Enclosed useable space below stair must have ½" gypsum board	
IRC R301.4	• Live load design 200 lbs/sq. ft. guardrails	
IRC R308	SAFETY GLAZING – required at...	
IRC R308.4.5	• Shower and tub enclosures	
IRC R308.4.1	• Side hinged doors except jalousies	
IRC R308.4.10	• Adjacent to stairs and landings	
IRC R308.4.6	• Panels adjacent & within 24 inches of door unless 12" barrier provided	
IRC R308.4.7	• Panels with 9 square feet and bottom within 18 inches of floor and top 36 inches above the floor and within 36 inches of a walking surface	
IRC 308.6	• Skylights and sloped glazing	
IBC 2407	• Glass guardrails	
IECC Chaps - 4, 5 & 6	ENERGY CODE FORM – Information on form, plans & rescheck report must match	
IRC N1102.1.4 floors N1102.1.1 walls	• Square footage of floors and walls noted	
N1102.1	• Percent of glazing – max. 15% for IRC simplified method	
IRC Table 1102.2	• Energy glazing factors – SHGC .40	
IRC Table 1102.1	• U factors and R-values	
IRC Table 1103.1	• HVAC efficiency rating – min. 13 SEER	
City Code & IBC 3110	DRIVEWAYS & SIDEWALKS	
Per Traffic Drawing No. 02754-01	• Width, Radius	
Handout drawing T&T	• Distance to both property lines	
IBC 3110.8	• Sidewalks req.if inside Loop 610, on major thoroughfare, or if lot frontage is ≥ 125'	
City Ordinance 40-182	• Not less than 24 feet from driveway to corner measured to inside of ROW line at the corner intersection	
Traffic Guidelines	• 2nd approach must have traffic approval	
NEC	ELECTRICAL CODE	
NEC 110.26.A.1	• 36" service panel clearance	

For further information and to check plan status:

www.houstonpermits.org